

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Please delete Claims 17 to 69 inclusive without prejudice and add new Claims 70 to 78.

1.-69. (Cancelled)

70. (New) An immobilized carbohydrate derivative biosensor, comprising:

a surface; and

a carbohydrate derivative, bound to the surface, which specifically binds to at least one biomolecule in a sample wherein the carbohydrate derivative comprises a fragment of a carbohydrate sequence found in a glycoprotein or a glycolipid which is an oligosaccharide modified in the reducing end with an aglycon selected from the group consisting of -OEtSEtCONHNH₂ and OEtSPhNH₂.

71. An immobilized carbohydrate derivative biosensor, comprising:

a surface; and

a carbohydrate derivative, bound to the surface, which specifically binds to at least one biomolecule in a sample wherein the carbohydrate derivative is a derivative in which the carbohydrate is modified in the reducing end with an O-, N-, C- or S-glycosidically bound aglycon, and said

glycosidically bound aglycon comprises a structure corresponding to a formula – R-X, wherein the biosensor corresponds to the formula:

carbohydrate-R-NH-CO-CH₂CH₂-S-biosensor surface.

72. (New) An immobilized carbohydrate derivative biosensor, comprising:

a surface; and

a carbohydrate derivative, bound to the surface, which specifically binds to at least one biomolecule in a sample wherein the carbohydrate derivative is a derivative in which the carbohydrate is modified in the reducing end with an O-, N-, C- or S-glycosidically bound aglycon, comprising a structure corresponding to a formula –R-X, and wherein the biosensor corresponds to the formula carbohydrate-R-X-protein-NH-CO-CH₂-CH₂-S-biosensor surface.

73. (New) The immobilized carbohydrate derivative biosensor according to claim 72, wherein the protein comprises bovine serum albumin.

74. (New) An immobilized carbohydrate derivative biosensor, comprising:

a surface; and

a carbohydrate derivative, bound to the surface, which specifically binds to at least one biomolecule in a sample,

wherein the surface comprises silica coated with a bold layer modified with mercaptopropionic acid by dipping the surface in a 5 mM solution of the acid.

75. (New) The immobilized carbohydrate derivative biosensor according to claim 74, wherein carboxyl groups of said acid are thereafter modified with carbodiimide (EDC), whereafter Gal α 1-4Gal β -OEtSEtCONHNH₂ is coupled to the surface for 12 hours at pH 8.5, and the surface rinsed with a buffer.

76. (New) A method of using the immobilized carbohydrate derivative biosensor according to claim 75, comprising:

dipping the surface in a sample containing bacteria of the urinary tract having Gal*1-4Gal-specific receptor protein;
thereafter rinsing the surface with distilled water; and
determining the extent of binding of the bacteria to the surface.

77. (New) The immobilized carbohydrate derivative biosensor according to claim 70, wherein the carbohydrate derivative comprises:

Gal α 1-4Gal β OCH₂CH₂SCH₂CH₂C(O)-NHNH-BSA, wherein BSA is bovine serum albumin.

78. (New) The immobilized carbohydrate derivative biosensor according to claim 70, wherein the carbohydrate derivative comprises Gal α 1-4Gal β -BSA, wherein BSA is bovine serum albumin.